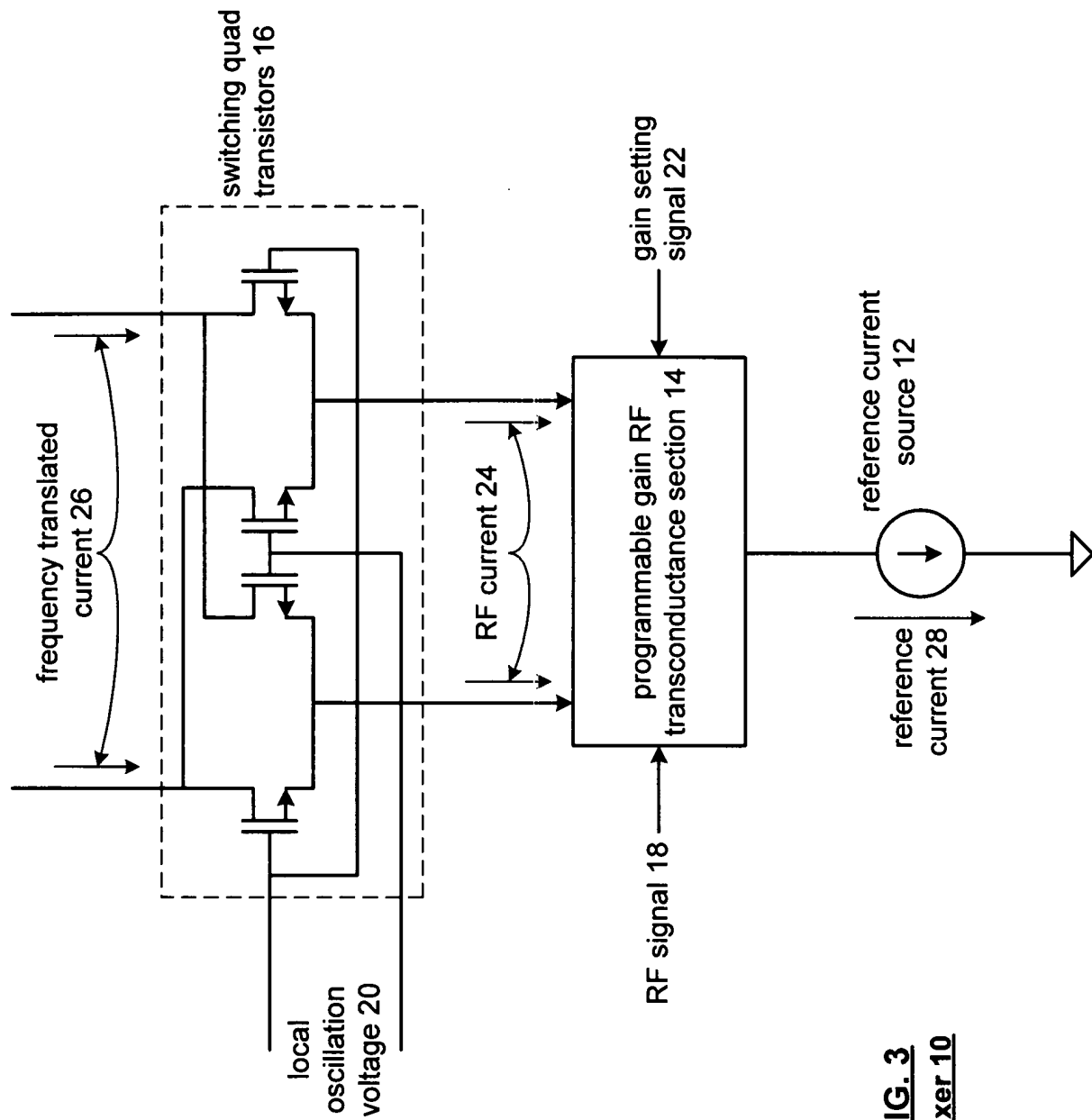
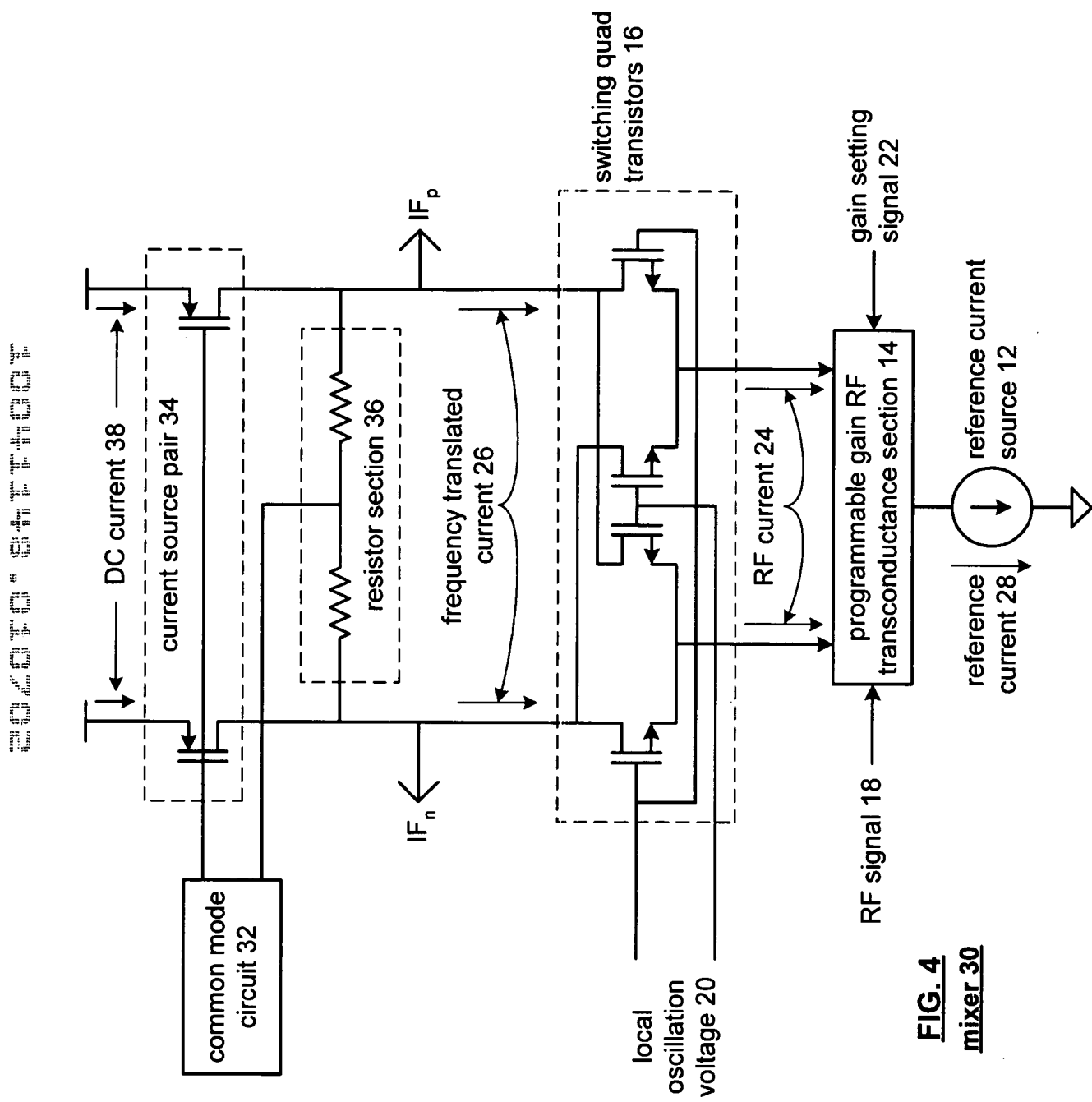
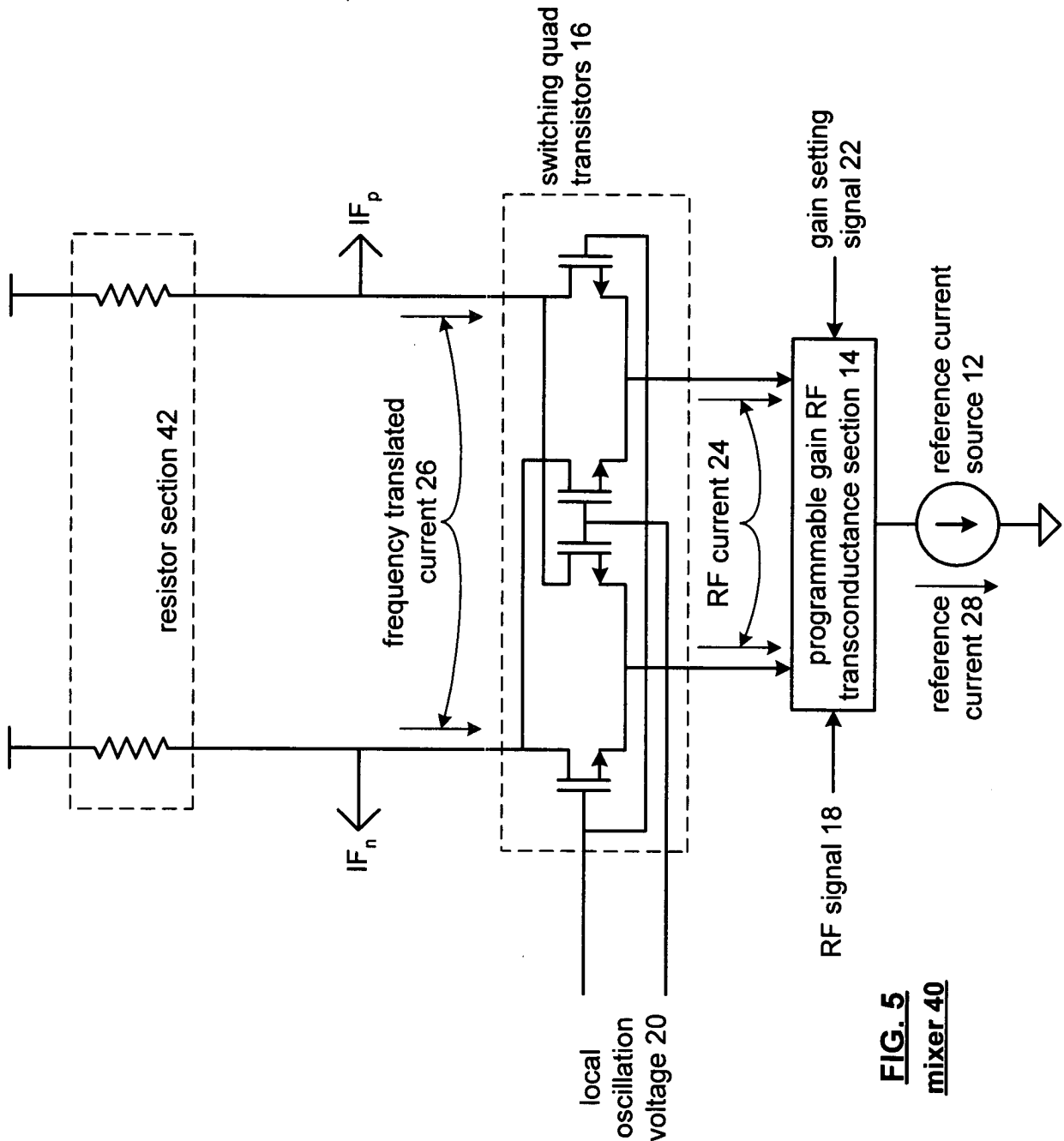


FIG. 3 is a schematic diagram of a mixer circuit, showing the internal structure of the switching quad transistors 16 and the programmable gain RF transconductance section 14.

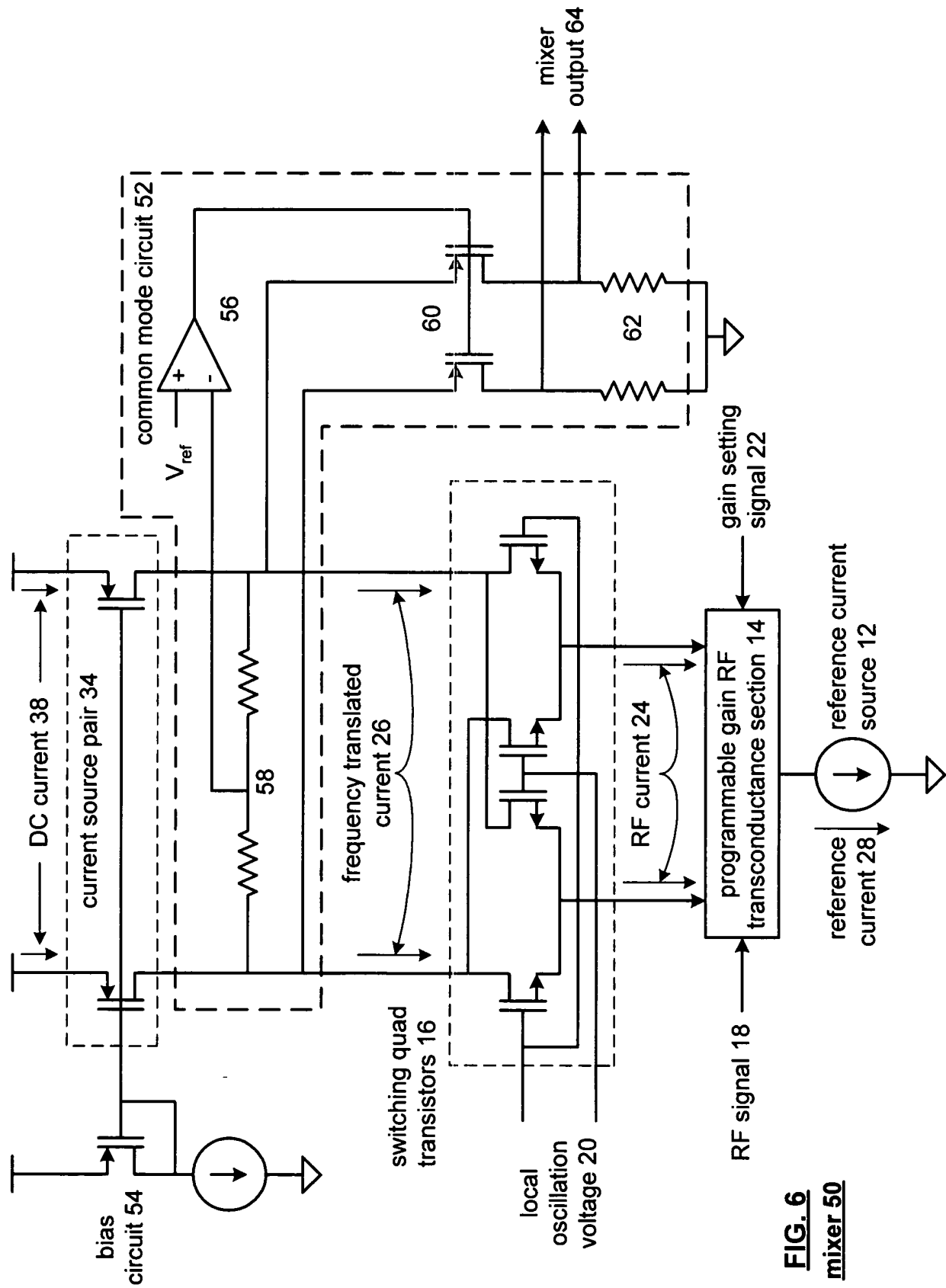


**FIG. 3**  
**mixer 10**

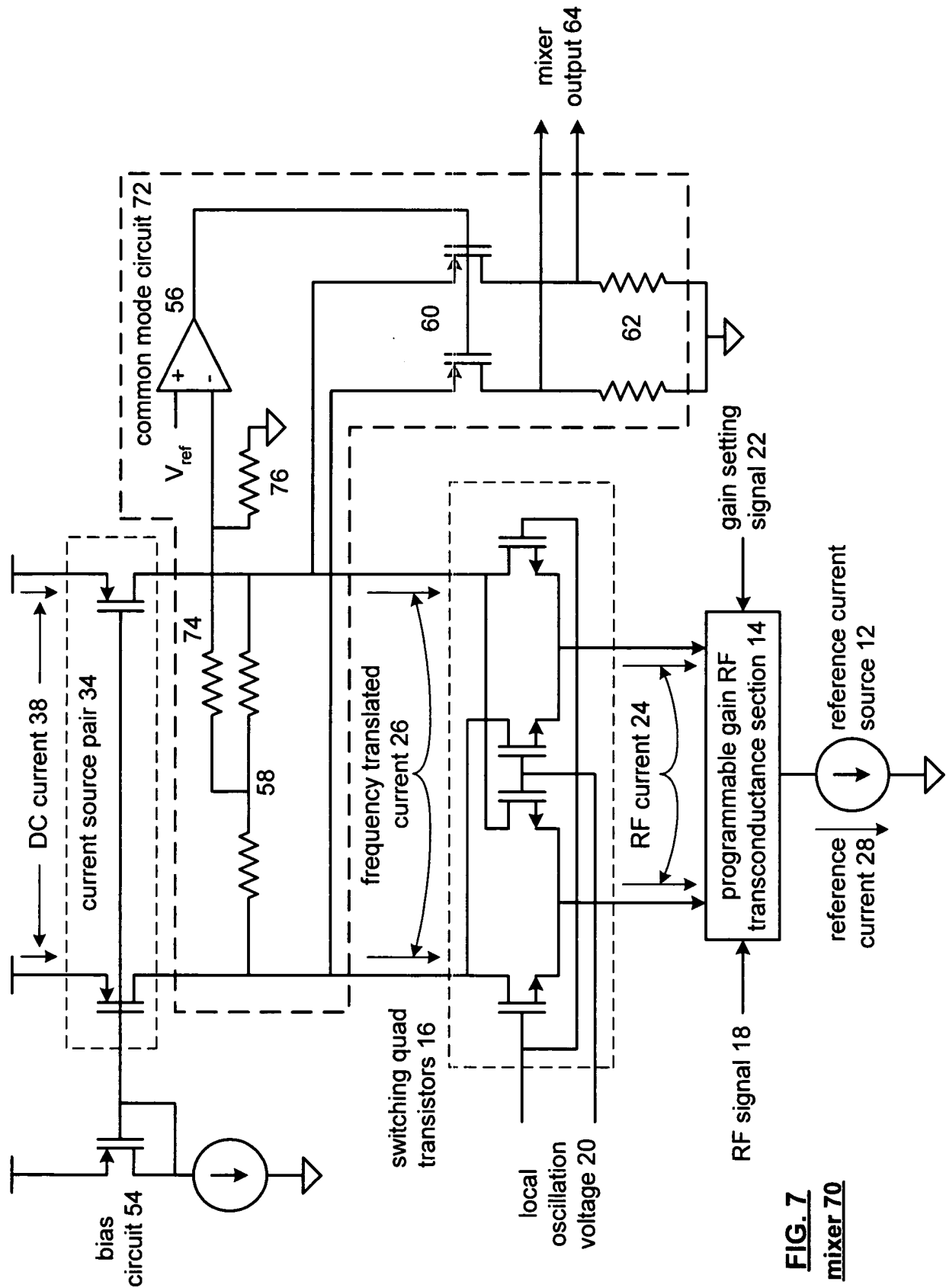




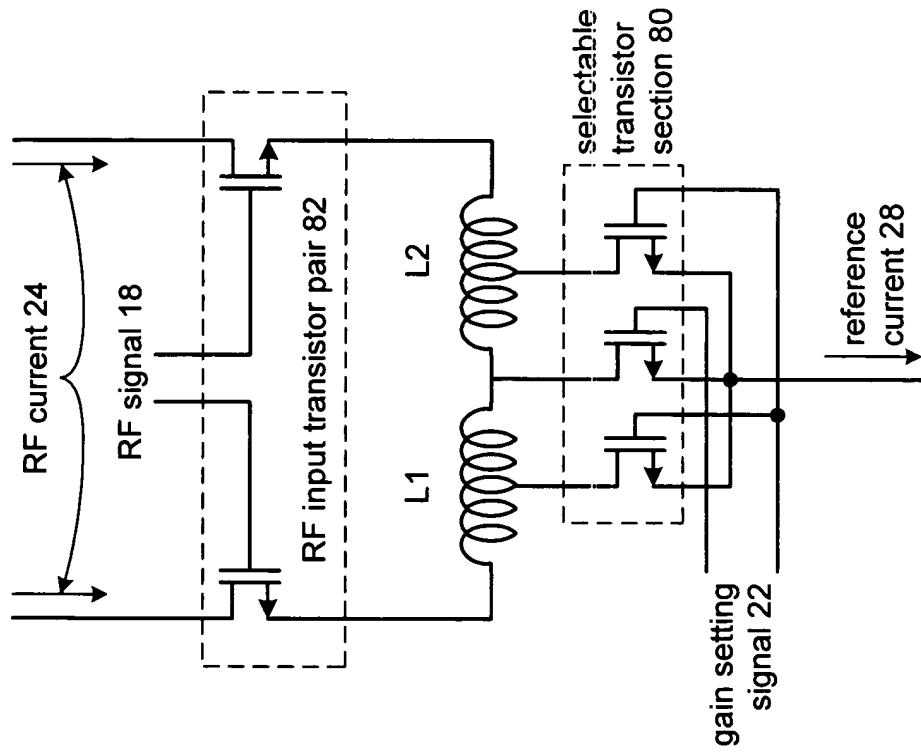
**FIG. 5**  
**mixer 40**



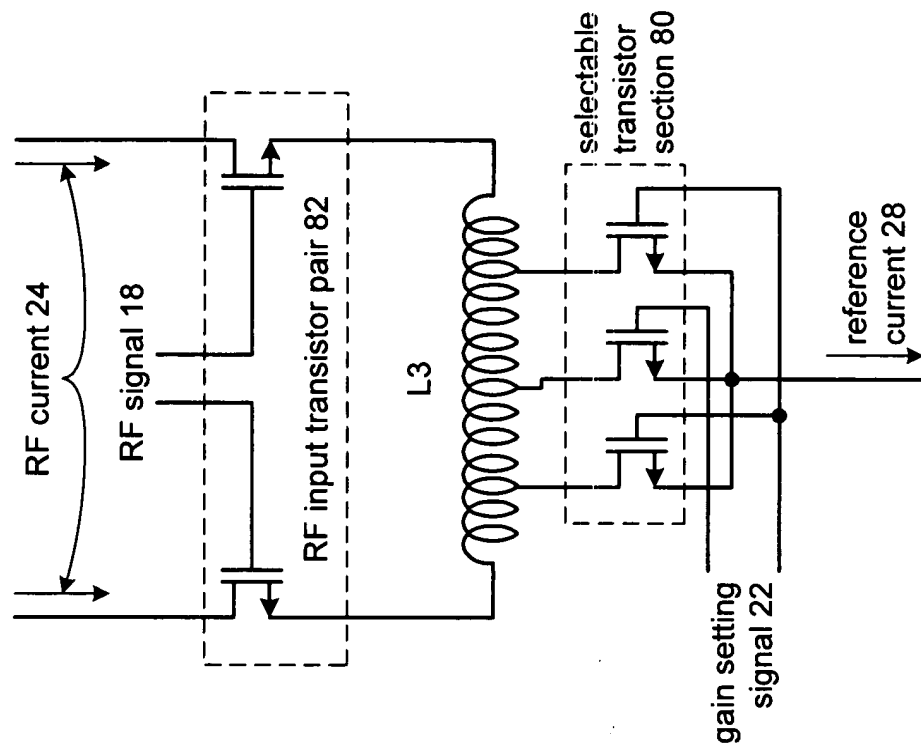
**FIG. 6**  
**mixer 50**



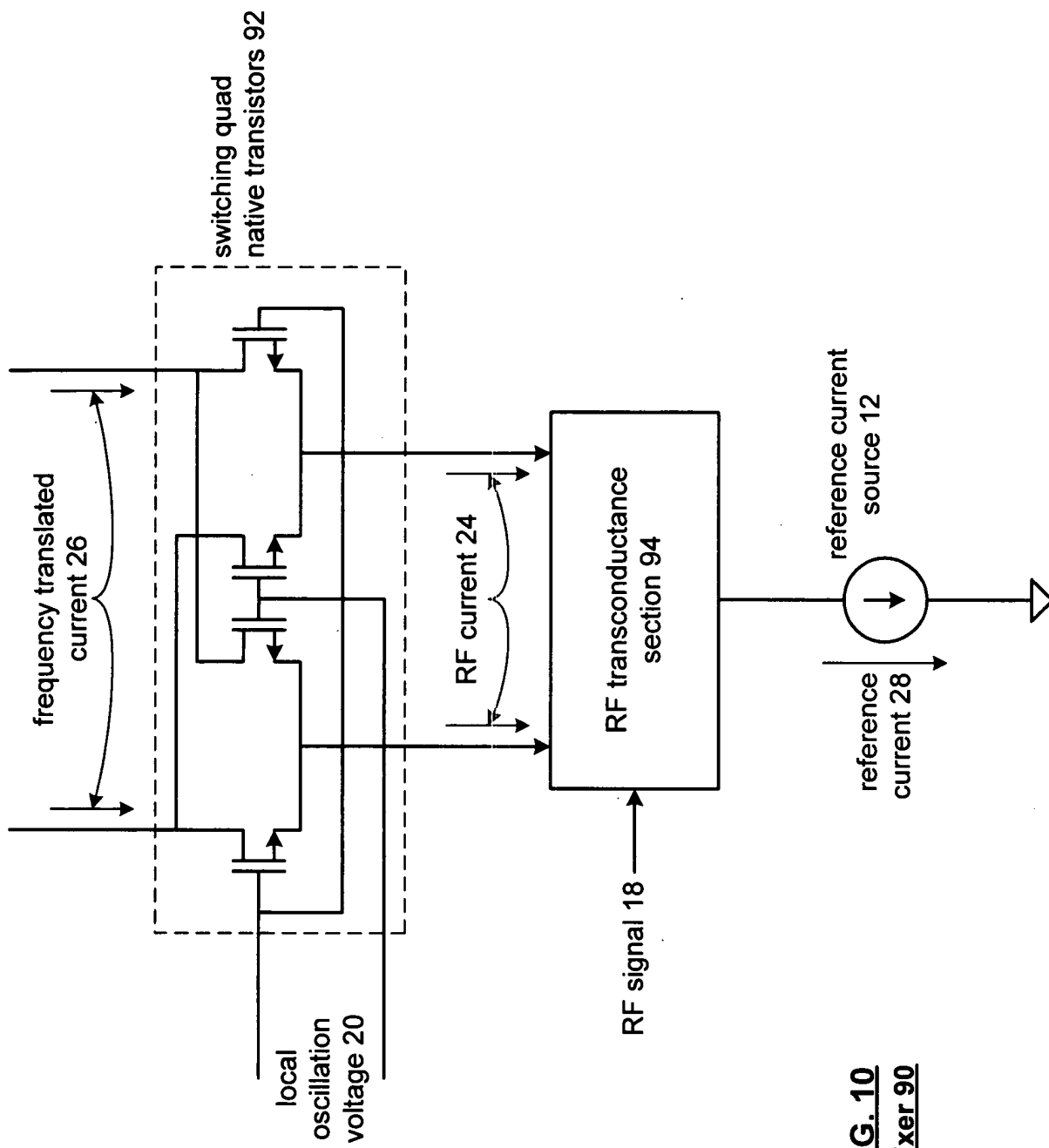
**FIG. 7**  
**mixer 70**



**FIG. 8**  
programmable gain RF  
transconductance section 14

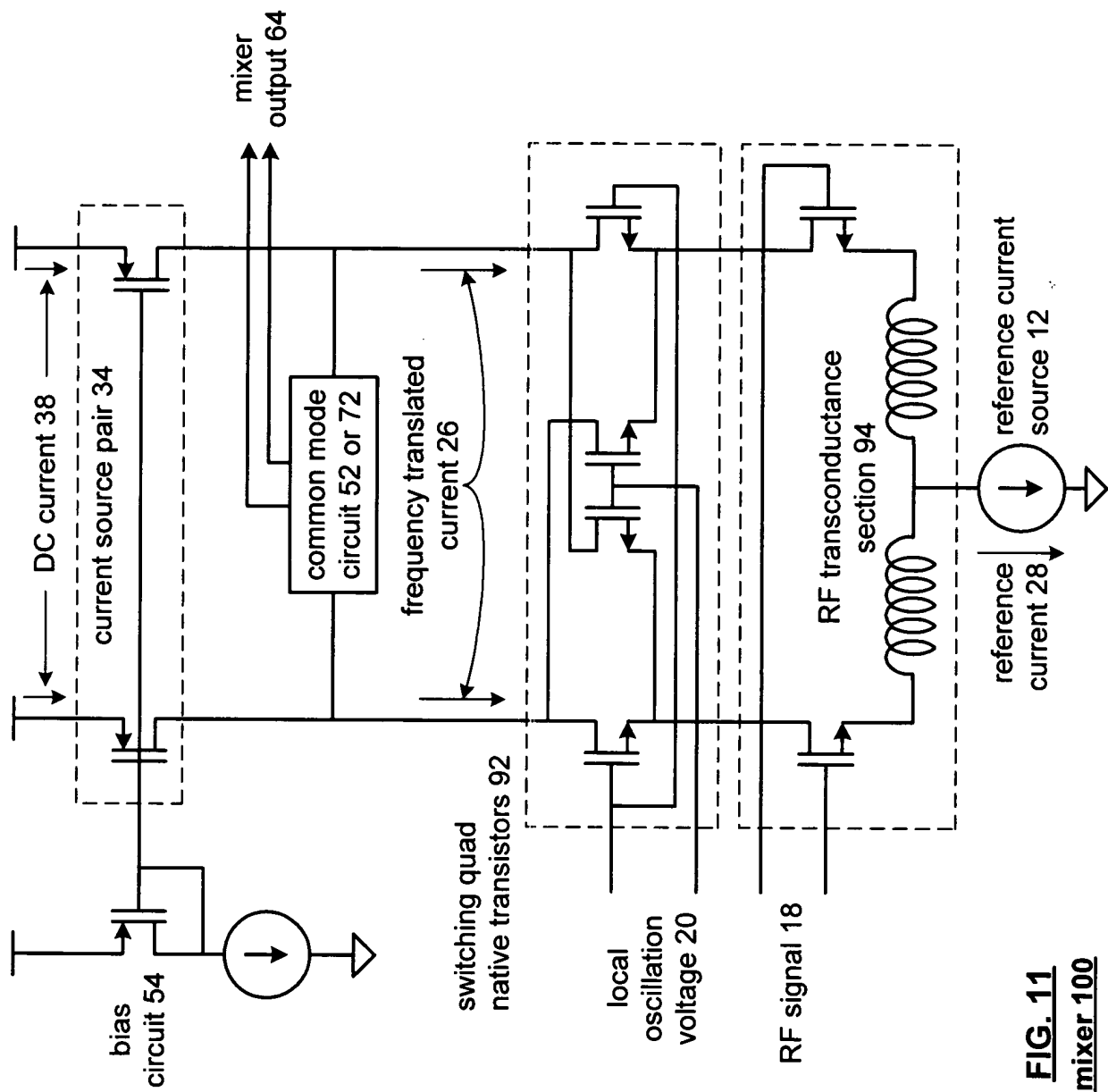


**FIG. 9**  
programmable gain RF  
transconductance section 14



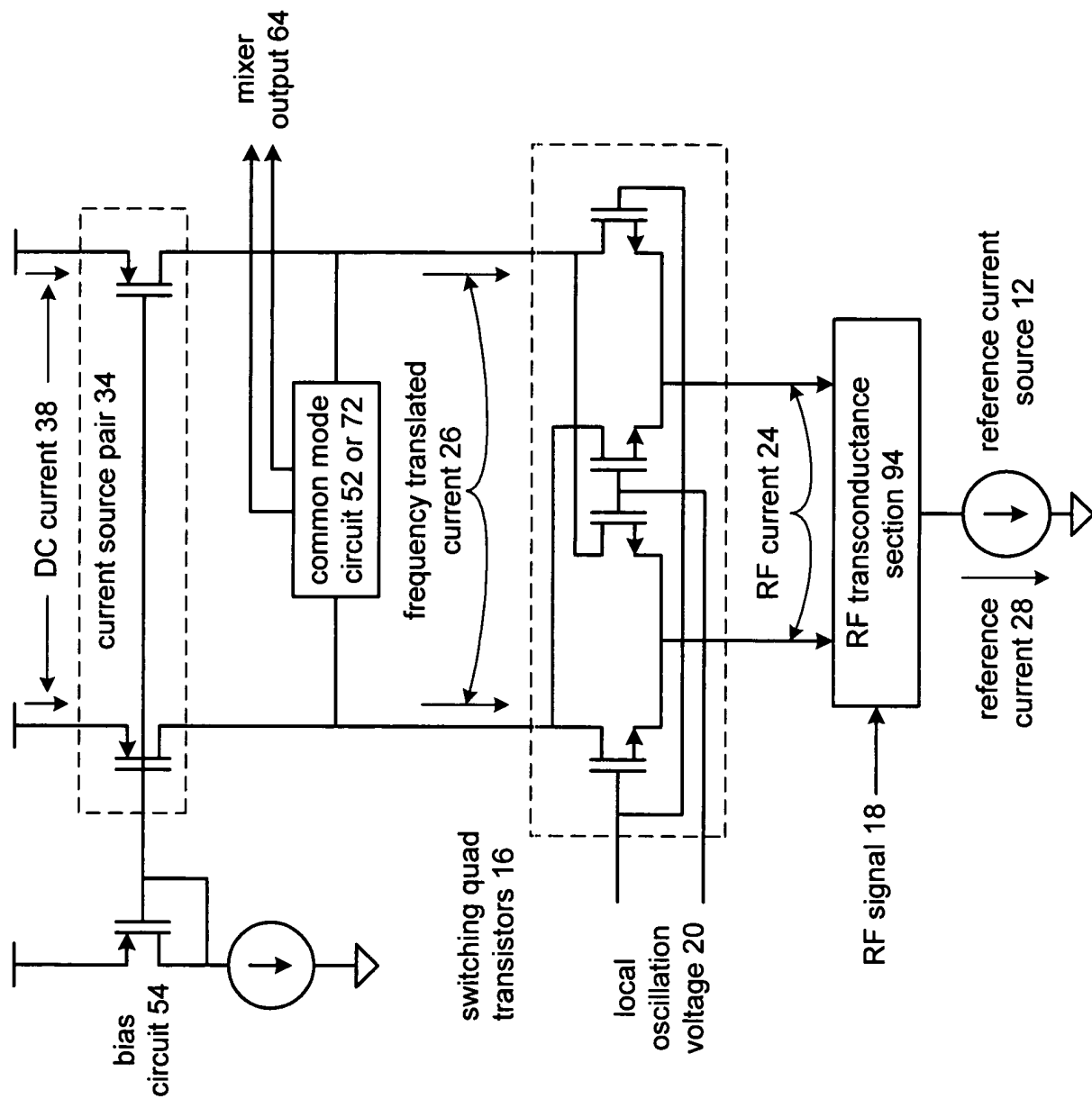
**FIG. 10**  
**mixer 90**





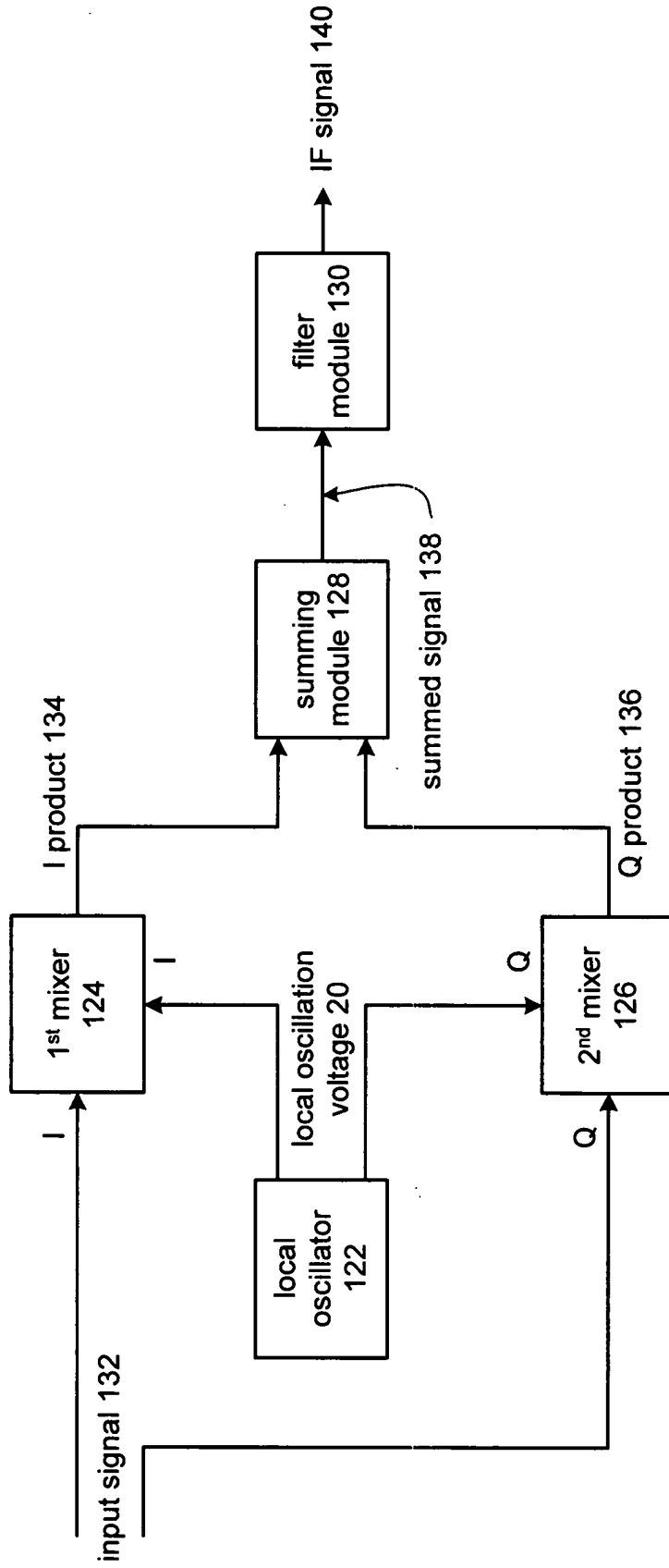
**FIG. 11**  
**mixer 100**

FIG. 12



**FIG. 12**  
**mixer 110**

FIG. 13



**FIG. 13**  
**IF module 120**